REMARKS

Claims 1-20 are pending in this application. Reconsideration of the Application is respectfully requested.

The drawings are objected to for failing to show the "particulate filter" recited in claims 7, 11 and 14. Applicants respectfully submit that, as discussed in the specification, the particulate filter may be included in the NOx catalyst (page 3, lines 5 and 6) and an NOx catalyst is shown, for example, in FIG. 1. For at least these reasons, Applicants submit that no changes to the drawings are required. It is respectfully requested that the objection be withdrawn.

Claims 1-6, 8-10, 12-13 and 15-20 are rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,233,925 to Hirota et al. (Hirota '925). The rejection is respectfully traversed for at least the following reasons.

Page 3 of the Office Action states that col. 15, lines 1-67 and col. 16, lines 1-69 of Hirota '925 discloses a reducing section for reducing an amount of nitrogen oxides occluded in the NOx catalyst before the temperature raising section is operated to raise the temperature of the NOx catalyst. Applicants respectfully disagree.

Hirota '925 discloses that at a predetermined timing before the SOx poisoning of the NOx catalyst 10 occurs, and the NOx discharge amount increases, SOx is discharged from the NOx catalyst 10 in the catalytic converter 11. The predetermined timing, at which SOx discharge processing is carried out, can be set at the timing at which the operation time of the engine 1, which is integrated by the ECU 20, reaches the predetermined time or at which the SOx absorption amount, which is estimated from the history of the operating state of the engine 1, reaches the predetermined amount (col. 15, lines 13-24). Further, for the SOx discharge, the catalysis temperature needs to be high and to ensure high catalysis temperature,

the ECU 20 executes SOx discharge processing while the catalysis temperature of the NOx catalyst 10 falls within the range suited for SOx discharge processing (col. 15, lines 33-35).

Thus, in Hirota '925 the ECU 20 raises the temperature of the NOx catalyst 10 at a predetermined timing and Hirota '925 fails to disclose, *inter alia*, a section for or the step of reducing an amount of nitrogen oxides occluded in the NOx catalyst before the temperature raising section is operated or the temperature raising step is performed to raise the temperature of the NOx catalyst, as recited in claims 1 and 15, respectively.

Further, with regard to claims 8 and 18, Applicants submit that Hirota '925 also fails to disclose or suggest, *inter alia*, a second reducing agent supplying section or a nitrogen oxides reducing step for increasing an amount of reducing agent supplied to the NOx catalyst before the temperature of the NOx catalyst is raised. Applicants respectfully submit that the Office Action fails to identify any portion of Hirota '925 that discloses such features.

Further, with regard to claims 12 and 20, Applicants submit that Hirota '925 fails to disclose or suggest, *inter alia*, an estimating section or an estimating step for estimating an amount of nitrogen oxides occluded in the NOx catalyst and a control section or step for raising the temperature of the NOx catalyst when the estimated amount of nitrogen oxides is less than a predetermined amount. Applicants respectfully submit that the Office Action fails to identify any portion of Hirota '925 that discloses such features.

In addition, claims 1, 8, 12, 15, 18 and 20 are advantageous at least because they provide devices and/or methods that suppress the discharging of unpurified NOx that can occur when the temperature of the NOx catalyst is increased to discharge SOx.

For at least these reasons, Applicants respectfully submit that Hirota '925 fails to disclose or suggest the combination of features recited in each of independent claims 1, 8, 12, 15 and 20, as well as all the features of claims 2-6, 9-10, 13, 16, 17, and 19, which respectively depend therefrom. It is respectfully requested that the rejection be withdrawn.

Claims 1-20 are rejected under 35 U.S.C. §102(b) over U.S. Patent No. 5,974,791 to Hirota et al. (Hirota '791). The rejection is respectfully traversed for at least the following reasons.

Hirota '791 discloses an ECU 30 that determines whether the amount of SOx absorbed in the DPF 10a has increased to a predetermined value based on the value of a SOx counter CSA at step 203. IF the value of the CSA reaches a predetermined value at step 203, the ECU 30 switches the switching valve 9 and the ECU 30 supplied additional electricity to raise the temperature of the DPF 10a to above a predetermined amount (col. 8, lines 48-62).

Thus, in Hirota '791 the ECU 30 raises the temperature of the DPF when the value of the CSA reaches a predetermined value. Hirota '791 fails to disclose, *inter alia*, a section for or the step of reducing an amount of nitrogen oxides occluded in the NOx catalyst before the temperature raising section is operated or the temperature raising step is performed to raise the temperature of the NOx catalyst, as recited in claims 1 and 15, respectively.

Further, with regard to claims 8 and 18, Applicants submit that Hirota '791 also fails to disclose or suggest, *inter alia*, a second reducing agent supplying section or a nitrogen oxides reducing step for increasing an amount of reducing agent supplied to the NOx catalyst before the temperature of the NOx catalyst is raised.

Further, with regard to claims 12 and 20, Applicants submit that Hirota '791 fails to disclose or suggest, *inter alia*, an estimating section or an estimating step for estimating an amount of nitrogen oxides occluded in the NOx catalyst and a control section or step for raising the temperature of the NOx catalyst when the estimated amount of nitrogen oxides is less than a predetermined amount. Applicants respectfully submit that the Office Action fails to identify any portion of Hirota '791 that discloses such features.

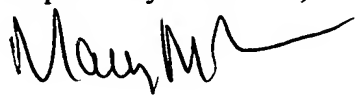
In addition, claims 1, 8, 12, 15, 18 and 20 are advantageous at least because they provide devices and/or methods that suppress the discharging of unpurified NOx that can occur when the temperature of the NOx catalyst is increased to discharge SOx.

Hirota '791 fails to disclose or suggest the combination of features recited in each of independent claims 1, 8, 12, 15, 18 and 20, as well as all the features of claims 2-7, 9-11, 13, 14, 16, 17, and 19, which respectively depend therefrom. It is respectfully requested that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of all pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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